

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF SOUTH CAROLINA

FRIENDS OF THE EARTH, INC., *et al.*, )  
  )  
  )  
Plaintiffs,                                 )  
  )  
  )  
v.    )  
  )  
GASTON COPPER RECYCLING                    )  
CORPORATION,                                 )  
  )  
  )  
Defendant.                                    )  
  )  
\_\_\_\_\_  
  )

Civil No. 3:92-2574-O

**THIRD DECLARATION OF BRUCE A. BELL, Ph.D., P.E., BCEE**

1. I have previously submitted two declarations in this matter. In May 2008, I submitted a declaration in support of Plaintiffs' Motion for Summary Judgment that They Have Standing to Continue This Action ("Bell First Declaration").<sup>1/</sup> In September 2008, I submitted a second declaration in response to Defendant's Response to Plaintiff's Brief on Standing and the Declaration of John K. Durkee ("Bell Second Declaration").<sup>2/,3/</sup>

2. I have been asked to prepare this declaration in response to Defendant's Sur-Reply on Standing ("Gaston Sur-Reply") and the Second Declaration of John K. Durkee ("Durkee Second Declaration"), filed on October 24, 2008.<sup>4/</sup>

3. In paragraph 3 of Durkee Second Declaration, Mr. Durkee states that, in concluding that

---

<sup>1/</sup>Declaration of Bruce A. Bell, Ph.D., P.E., BCEE, May 30 , 2008 ("May 2008 Bell Declaration").

<sup>2/</sup>Second Declaration of Bruce A. Bell Ph.D., P.E., BCEE, September 17, 2008 ("Bell Second Declaration").

<sup>3/</sup>Declaration of John K. Durkee, September 2, 2008 ("Durkee Declaration").

<sup>4/</sup>Second Declaration of John K. Durkee, October 23, 2008 ("Durkee Second Declaration").

Gaston's discharge resulted in violations of water quality standards, I ignored other point and non-point discharges. This is incorrect. I did not state that Gaston's discharge was the sole cause of violations. However, as stated in paragraph 14 of Bell Second Declaration, Gaston's discharge has necessarily contributed to increased metal concentrations and water quality violations up to at least 105 miles downstream of the confluence of Bull Swamp Creek and the North Fork of the Edisto River because metals from Gaston's discharge travel this distance. Mr. Durkee has not disputed this fact.

4. In paragraph 3 of Durkee Second Declaration, Mr. Durkee confuses Practical Quantification Limit ("PQL") with Method Detection Level ("MDL"). The MDL is the lowest concentration that is statistically different from zero at a 99% confidence level.<sup>5/</sup> The PQL is the concentration that can be quantified to an acceptable degree of statistical certainty. A result between the MDL and the PQL is not the equivalent of zero. Therefore, Mr. Durkee is incorrect that such results are "undetectable."

5. Defendant argues that the concentrations of relevant metals were essentially indistinguishable between water quality samples taken in the North Fork upstream of its confluence with Bull Swamp Creek and samples taken in Bull Swamp Creek upstream of the confluence.<sup>6/</sup> First, I do not agree with Mr. Durkee's contention that cadmium, copper, and zinc are the only relevant metals.<sup>7/</sup> As I have previously explained, Gaston also violated its discharge limitation for iron, which

---

<sup>5/</sup>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition, American Public Health Association, American Water Works Association and Water Environment Federation, 2005.

<sup>6/</sup>Gaston Sur-Reply, p. 5.

<sup>7/</sup>Durkee Second Declaration, para. 6.

was regulated during the time period in question.<sup>8/</sup> In addition, Gaston violated monitoring and reporting requirements with respect to lead, mercury, and nickel, making it impossible to determine whether permit limitations were exceeded for those metals.<sup>9/</sup>

6. In any event, defendant's conclusion is unsupportable. This Court found that Gaston violated its effluent limitations for metals on specific days between February 8, 1993, and March 22, 1994.<sup>10/</sup> The STORET data include water quality samples taken at Stations E-104 (North Fork) and E-042 (Bull Swamp Creek) on only two days during this period, June 18, 1992, and September 17, 1992.<sup>11/</sup> On June 8, 1992, Gaston sampled its effluent and was in compliance with effluent limits for cadmium, copper, and zinc.<sup>12/</sup> On September 17, 1992, Gaston did not sample its effluent.<sup>13/</sup> Thus, there were no water quality samples ever taken at the stations referenced by defendant on days that this Court found Gaston violated its effluent limitations for metals. As a result, no conclusions regarding the relative concentrations of metals at Stations E-104 and E-042 can be drawn for the days that Gaston violated its effluent limits for metals.

7. In paragraph 10 of Durkee Second Declaration, Mr. Durkee states that in his analysis, he employed water quality data from Station E-104, which is located upstream of the confluence. As I previously explained, the data show elevated levels of metals in the waters at this location.<sup>14/</sup> Available data do not support a conclusion that Gaston's discharge will be diluted. Moreover, Mr.

---

<sup>8/</sup>Bell Second Declaration, note 17.

<sup>9/</sup>Bell First Declaration, para. 7; Bell Second Declaration, note 18.

<sup>10/</sup>Findings of Fact and Conclusions of Law, Docket No. 166 (July 18, 2003) ("2003 Findings and Conclusions"), pp. 22-27, 47-48, 53-54; Pl. Trial Exs. 175, 500.

<sup>11/</sup>USEPA STORET sampling data for Stations E-104 and E-042.

<sup>12/</sup>Gaston Copper Recycling Corporation Analytical Results for June 8, 1992 (Attachment A).

<sup>13/</sup>See Plaintiffs' Trial Exhibit 186, which contains Gaston's laboratory reports. The exhibit is voluminous, but I have found no report for September 17, 1992.

<sup>14/</sup>Bell Second Declaration, para. 17.

Durkee failed to consider data from other locations within the 105 miles that Gaston's discharge travels. As stated in paragraph 14 of Second Bell Declaration, there are higher concentrations of metals discharged by Gaston downstream of the confluence.

8. In paragraph 10 of Durkee Second Declaration, Mr. Durkee claims that I was wrong in characterizing his reasonable potential to pollute analysis as incorrect. First, a "reasonable potential to pollute" analysis is conducted before a permit is issued. It has no applicability to Gaston's then-existing permit which contained water-quality-based effluent limitations.<sup>15/</sup> Second, as I explained earlier,<sup>16/</sup> Mr. Durkee incorrectly ignores downstream contributions of pollutants from other sources, which must be considered in any potential to pollute analysis.<sup>17/</sup> Mr. Durkee offers no response to this point.

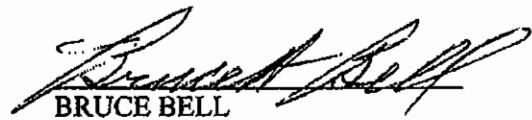
---

<sup>15/</sup>2003 Findings and Conclusions, pp. 17-19.

<sup>16/</sup>Bell Second Declaration, para. 18.

<sup>17/</sup>United States Environmental Protection Agency, NPDES Permit Writer's Manual, 1996.

Pursuant to 28 U.S.C. 1746, I declare under penalty of perjury that the foregoing  
is true and correct. Executed on November 7, 2008.



A handwritten signature in black ink, appearing to read "Bruce Bell".

BRUCE BELL